

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

اختبار شهر ابريل



Model Exam 1

Total mark

20



Question 1

5

(A) Put (✓) or (X) :

(2 marks)

The energy produced by wind turbines is known as hydroelectric energy. ()

(B) Write the scientific term of each of the following :

(3 marks)

1. They are deep valleys carved by flowing water. (.....)

2. A process in which the sediments are dropped in a new location by the action of wind, water and gravity. (.....)

Question 2

5

(A) Choose the correct answer :

(2 marks)

The breakdown of rocks either mechanically or chemically is called

a. rusting. b. weathering. c. deposition. d. erosion.

(B) Give reasons for :

(3 marks)

1. Formation of a delta when a river meets a sea.

.....

2. Some dams contain water turbines.

.....

Question 3

5

(A) Correct the underlined word :

(2 marks)

Dams are built on rivers in order to generate solar energy. (.....)

(B) Complete the following sentences :

(3 marks)

1. The air moving from an area to another and has a role in breaking down of rocks into smaller particles is known as

2. Some tiny plant-like organisms produce that can dissolve minerals of rocks causing their breaking down.

Question 4

5

(A) Put (✓) or (X) :

(2 marks)

Reaction between oxygen and the iron of some rocks causes its chemical weathering. ()

(B) What happens if ...?

(3 marks)

1. Sea waves hit coastal rocks over a long period of time.

2. Potential energy of water increases behind a dam that has water turbines.

Model Exam 2

Total mark

20

Question 1

5

(A) Choose the correct answer :

(2 marks)

Among the changes which are happened very fast, is

a. formation of deep canyons.

b. disappearance of a sandcastle.

c. breaking down of coastal rocks.

d. breaking down of mountain rocks.

(B) Mention one example for each of the following :

(3 marks)

1. Chemical weathering:

2. Slow change of Earth's surface:

Question 2

5

(A) Put (✓) or (X) :

(2 marks)

Dams are built on rivers to control the wind flow.

()

(B) Give reasons for :

(3 marks)

1. Iron in rocks may rust.

2. Formation of large sand dunes at Western Desert in Egypt.

Question 3

5

(A) Correct the underlined word :

(2 marks)

The thermal energy generated by water turbines in dams is known as hydroelectricity.

(.....)

(B) What happens if...?

(3 marks)

1. Lichens growing on rocks produce acids.

2. A river carries sediments meet a sea.

.....

Question 4

5

(A) Put (✓) or (X) :

(2 marks)

Limestone caves are formed as a result of chemical weathering.

()

(B) Write the scientific term of each of the following :

(3 marks)

1. A process in which water changes into water vapor.

(.....)

2. A type of weathering in which the colors of paints of houses are changed as a result of falling of acid rains.

(.....)

Model Exam 3

Total mark

20

Question 1

5

(A) Put (✓) or (X) :

(2 marks)

Gravity pulls rocks down the mountainsides causing their erosion.

()

(B) Complete the following sentences :

(3 marks)

1. In water turbines, the energy of water movement is converted into a type of electrical energy which is called energy.

2. In the weathering, the chemical structure of rocks doesn't change.

Question 2

5

(A) Correct the underlined word :

(2 marks)

Hills of sand which are found in deserts and seashores are known as canyons.

(.....)

(B) Give reasons for :

(3 marks)

1. Formation of canyons is considered as an example of slow changes.

.....

2. Hydroelectric dams are built on rivers.

.....

Question 3

5

(A) Choose the correct answer :

(2 marks)

All the following are from causes of chemical weathering, except

a. oxygen.

b. water.

c. acid rains.

d. wind.

(B) What is meant by (Define) :

(3 marks)

1. Hydroelectricity :
2. Delta :

Question 4

5

(A) Correct the underlined word :

(2 marks)

During the flowing of river's water downhill, the chemical potential energy of water is converted into kinetic energy. (.....)

(B) Compare between :

(3 marks)

Points of comparison	Mechanical weathering	Chemical weathering
Definition :		
Its effect :	Causes changing of the structure of rocks without any change in	Causes changing of the structure of rocks producing

Model Exam 4

Total mark

20

Question 1

5

(A) Put (✓) or (X) :

(2 marks)

Running water in rivers has kinetic energy. ()

(B) What happens if ...?

(3 marks)

1. A red-colored rust is formed on some rocks.
.....
2. Water of seas and rivers evaporates, then condenses in the atmospheric air.
.....

Question 2

5

(A) Choose the correct answer :

(2 marks)

The deep valley with slopes at its sides and often with water flowing through it is known as

- a. canyon. b. mountain. c. hill. d. river.

(B) Write the scientific term of each of the following :

(3 marks)

1. The process in which the water of rivers evaporates, then condenses forming clouds and returns back to rivers through rainfalls. (.....)
2. It is a type of weathering through which acids of lichens dissolve minerals of rocks. (.....)

Question 3

5

(A) Correct the underlined word :

(2 marks)

- When water freezes, it expands and its volume decreases. (.....)

(B) Complete the following sentences :

(3 marks)

1. Clouds are formed due to the, then of water of rivers and seas.
2. When strong blow in the desert, large sand dunes are formed.

Question 4

5

(A) Cross out the odd sentence :

(2 marks)

Breaking of statues - Removing of paints of buildings - Pulling a wave to the sand of seashores - Evaporation of water. (.....)

(B) What are the two main types of weathering?

(3 marks)

1. weathering.
2. weathering.

Model Exam 5

Total mark

20

Question 1

5

(A) Choose the correct answer :

(2 marks)

When a river meets a sea or an ocean, a is formed.

- a. canyon b. volcano c. mountain d. delta

(B) Give reasons for :

(3 marks)

1. Water turbines are placed in waterfalls areas.

2. Water plays an important role in the formation of limestone caves.

.....

Question 2

5

(A) Put (✓) or (X) :

(2 marks)

Strong wind and hurricanes carry sand grains for a short distance.

()

(B) Write the scientific term of each of the following :

(3 marks)

1. A hill of sand created by the wind.

(.....)

2. A type of electrical energy generated by water turbines in dams.

(.....)

Question 3

5

(A) Correct the underlined word :

(2 marks)

Canyons are deep mountains carved by flowing water.

(.....)

(B) Mention an example for each of the following :

(3 marks)

1. Action of weak wind deposition:

2. Action of strong wind deposition:.....

Question 4

5

(A) Cross out the odd word :

(2 marks)

Weathering - Erosion - Deposition - Evaporation.

(.....)

(B) Mention two forces that are responsible for the disappearance of sandcastles and erosion of coasts :

(3 marks)

1. Force of

2. Force of

Model Exam 1

- 1 (A) (✗)
(B) 1. Canyons.
2. Deposition process.
- 2 (A) b
(B) 1. Because the sediments are deposited at the end of the river.
2. Because kinetic energy of moving water in dams is used to rotate water turbines to generate hydroelectric energy.
- 3 (A) hydroelectric
(B) 1. wind.
2. acids
- 4 (A) (✓)
(B) 1. The shape of coastal rocks will change due to breaking down of some parts of rocks.
2. It converts into more kinetic energy which causes water turbines rotate faster and generate more electricity.

Model Exam 2

- 1 (A) b
(B) 1. Breaking down of rocks by the effect of acid rains.
2. Formation of canyons.
- 2 (A) (✗)
(B) 1. Due to the reaction between iron and oxygen of air.
2. Because they are formed by the effect of strong winds.
- 3 (A) electrical
(B) 1. The acids dissolve minerals that are present in these rocks, so rocks become weak and can break down easily.
2. A delta may be formed.

- 4 (A) (✓)
(B) 1. Evaporation process.
2. Chemical weathering.

Model Exam 3

- 1 (A) (✓)
(B) 1. kinetic – hydroelectric
2. mechanical
- 2 (A) sand dunes.
(B) 1. Because they are formed due to the slow changes that happened to their rocks over many years.
2. To control the water flow and increase the potential energy of water to generate electricity.
- 3 (A) d
(B) 1. It is a type of electrical energy generated by water turbines in dams.
2. It is a fan-shaped (triangle-shaped) mass of mud and other sediments that forms where a river enters a large body of water.

- 4 (A) gravitational
(B)

Points of comparison	Mechanical weathering	Chemical weathering
Definition :	It is the breaking down of rocks due to the effect of physical factors.	It is the change of the structure of rocks due to chemical reactions.
Its effect :	Causes changing of the structure of rocks without any change in their nature.	Causes changing of the structure of rocks producing new materials.

Model Exam 4

- 1 (A) (✓)
(B) 1. These rocks become weak and can break down easily.
2. Clouds are formed and rain may fall.
-
- 2 (A) a
(B) 1. Water cycle.
2. Chemical weathering.
-
- 3 (A) increases.
(B) 1. evaporation – condensation
2. winds
-
- 4 (A) Evaporation of water (All items are examples of weathering, while evaporation of water is not).
(B) 1. Mechanical
2. Chemical

Model Exam 5

- 1 (A) d
(B) 1. Because water turbines convert kinetic energy of flowing water into electrical energy.
2. Because water dissolve minerals in rocks, then these dissolved minerals combine again forming new shapes.
-
- 2 (A) (✗)
(B) 1. Sand dune. 2. Hydroelectricity.
-
- 3 (A) valleys
(B) 1. Sand dunes on a beach.
2. Sand dunes in Western Desert in Egypt.
-
- 4 (A) Evaporation (All items are processes that change the shape of Earth, while evaporation process is not).
(B) 1. water. 2. wind.

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

اختبار شهر ابريل



1 A) Choose the correct answer:

- Both waterfalls and are renewable energy resources.

- | | |
|---------|----------------|
| a) wind | b) coal |
| c) oil | d) fossil fuel |

B) Answer the following questions:

1 What is meant by erosion?

.....

2 Determine the type of weathering in breaking down of rocks by the effect of growth of plant roots inside the cracks of rocks.

.....

2 A) Put (✓) or (X):

- Shaping the Earth started by deposition, then weathering and ends with erosion. ()

B) Give a reason for:

1 Formation of large sand dunes in the Western Desert in Egypt.

.....

2 Some dams contain water turbines.

.....

3 A) Complete the following sentence:

- Water behind a dam stores energy.

B) What happens when...?

1 Sea waves hit coastal rocks over a long period of time.

.....

2 A river carrying sediments meets a sea.

.....

4

A) Write the scientific term:

- A process in which water vapor changes into water.

(.....)

B) Answer the following questions:

- 1 This device is called a, which has colored pipes to heat up

- 2 **Compare between:** Weather and weathering.
(in terms of definitions and factors affecting each of them)



Point of comparison	Weather	Weathering
Definitions		
Factors affecting each of them		

1 A) Correct the underlined word:

- The force of the moon pulls down broken weathered rocks at mountainsides.

(.....)

B) Give a reason for:

- Formation of limestone caves on a mountain.

•

- Hydroelectric dams are built on rivers.

•

2 A) Put (✓) or (X):

- The energy produced by wind turbines is known as hydroelectric energy.

()

B) What happens when ...?

- Lichens growing on rocks produce acids.

•

- Wind doesn't blow in an area that contains many modern wind turbines.

•

3 A) Write the scientific term:

- It is the process of laying down of sediments after their erosion.

(.....)

B) Answer the following questions:

- Mention** the factors that lead to changes in the Earth's surface.

•

- What is meant by canyons?

•

4

A) Choose the correct answer:

- Each of the following plays a role in erosion process, **except**
 - a) wind
 - b) water
 - c) sunlight
 - d) Earth's gravity

B) Answer the following questions:

1 Look at the opposite figure, then complete:

- The opposite figure results from the effect of

2 Mention one difference between the use of wind to generate electricity and the use of water to generate electricity.



•

1 A) Put (✓) or (X):

- The use of water to generate electricity depends on where boats sail in rivers. ()

B) What happens when ...?

- 1 Sunlight falls on solar panels.

•

- 2 Water freezes and melts in the cracks of rocks many times for long periods.

•

2 A) Cross out the odd word:

- Sun – Wind – Water – Coal.

B) Answer the following questions:

- 1 **Compare between:** Mechanical weathering and Chemical weathering.
(in terms of definition).

Point of comparison	Mechanical weathering	Chemical weathering
Definitions		

- 2 Erosion and deposition are linked processes. **Explain.**

•

3 A) Write the scientific term:

- A turbine in which the kinetic energy of moving water is used to generate hydroelectric energy. (.....)

B) Give a reason for:

- 1 Iron in rocks may rust.

•

- 2 Wind turbines are built in coastal areas or deserts.

•

4 A) Complete the following sentence:

- Old windmills are than modern wind turbines.

B) Look at the opposite figure, then complete:

- 1** Figure (1) represents which is an example of the weathering.
- 2** Figure (2) represents which is an example of the process.



Figure (1)



Figure (2)

1 A) Complete the following sentence:

- Dams are built on rivers in order to generate energy.

B) What is the type of weathering?

- 1 Water dissolves some minerals in rocks. (.....)
- 2 Animals digging tunnels. (.....)

2 A) Cross out the odd word:

- Acid rain – Wind – Plant roots – Temperature.

B) Answer the following questions:

- 1 What is meant by delta?
•
- 2 Mention the disadvantages of using windmills.
•

3 A) Put (✓) or (X):

- Chemical weathering causes greater changes than mechanical weathering. ()

B) Give a reason for each of the following:

- 1 Formation of sand dunes on a beach.
•
- 2 Flooding of water plays an important role in the erosion process.
•

4

A) Choose the correct answer:

- Water expands when it freezes, which means
 - a) it will evaporate
 - b) its temperature increases
 - c) its volume decreases
 - d) its volume increases

B) What happens when...?

- 1 The acid rain falls on rocks.
 -
- 2 The water of a river flows downhill. (in terms of change of energy).
 -

1 A) Cross out the odd word:

- Oxygen – Lichens – Plant roots – Acid rains.

B) Compare between:

- 1 The formation of sand dunes and the formation of canyons.

Point of comparison	Sand dunes	Canyons
The formation		

- 2 Water turbines and solar panels. (in terms of source of energy that is used to operate them and the produced energy).

Point of comparison	Water turbines	Solar panels
Source of energy that is used to operate them		
The produced energy		

2 A) Put (✓) or (X):

- The Nile River delta has a rectangular shape. ()

B) Answer the following questions:

- 1 Give a reason for: The shape of coastal rocks changes after many years.

•

- 2 What is meant by hydroelectricity?

•

3 A) Correct the underlined word:

- Chemical weathering takes place when friction occurs between sand and rocks.

(.....)

B) Answer the following questions:

- 1 Mention the main processes that change Earth's surface.

•

- 2 Give an example for: A tiny plant-like organism produces acid that breaks down rocks.

(.....)

4 A) Write the scientific term:

- It is a device that uses the wind to rotate its blades and generate electricity.

(.....)

B) What happens when ...?

- 1 Water of seas and rivers evaporates, then condenses in the atmospheric air.

•

- 2 A red-colored rust is formed on some rocks.

•

1 A) Choose the correct answer:

- Both waterfalls and are renewable energy resources.

- | | |
|---------|----------------|
| a) wind | b) coal |
| c) oil | d) fossil fuel |

B) Answer the following questions:

1 What is meant by erosion?

- It is the process in which small particles of sand, soil, and rocks are moved to other places by wind, water, or gravity.

2 Determine the type of weathering in breaking down of rocks by the effect of growth of plant roots inside the cracks of rocks.

- Mechanical weathering.

2 A) Put (✓) or (X):

- Shaping the Earth started by deposition, then weathering and ends with erosion. (X)

B) Give a reason for:

1 Formation of large sand dunes in the Western Desert in Egypt.

- They are formed due to the effect of strong winds.

2 Some dams contain water turbines.

- Because kinetic energy of the moving water in dams is used to rotate water turbines to generate hydroelectric energy.

3 A) Complete the following sentence:

- Water behind a dam stores potential energy.

B) What happens when...?

1 Sea waves hit coastal rocks over a long period of time.

- The shape of coastal rocks will change.

2 A river carrying sediments meets a sea.

- Delta is formed.

4 A) Write the scientific term:

- A process in which water vapor changes into water.

(Condensation)

B) Answer the following questions:

- 1 This device is called a **solar water heater**, which has **black** colored pipes to heat up **water**.
- 2 **Compare between:** Weather and weathering.
(in terms of definitions and factors affecting each of them)



Point of comparison	Weather	Weathering
Definitions	It is the condition of atmosphere at a specific place and time.	It is the breaking down of rocks on Earth's surface into smaller pieces.
Factors affecting each of them	Temperature, wind, rains etc.	Temperature, wind, and water.

1 A) Correct the underlined word:

- The force of the moon pulls down broken weathered rocks at mountainsides.

(gravity)

B) Give a reason for:

- 1 Formation of limestone caves on a mountain.
 - Because water dissolves minerals in rocks, then these dissolved minerals combine again forming new shapes.
- 2 Hydroelectric dams are built on rivers.
 - To control the water flow and increase the potential energy of water to generate electricity.

2 A) Put (✓) or (X):

- The energy produced by wind turbines is known as hydroelectric energy. (X)

B) What happens when ...?

- 1 Lichens growing on rocks produce acids.
 - The acids dissolve minerals present in the rocks, so rocks become weak and can be broken down easily due to chemical weathering.
- 2 Wind doesn't blow in an area that contains many modern wind turbines.
 - The blades of wind turbines don't move and also don't generate electricity.

3 A) Write the scientific term:

- It is the process of laying down of sediments after their erosion. (Deposition)

B) Answer the following questions:

- 1 **Mention** the factors that lead to changes in the Earth's surface.
 - Water, wind, and weather changes.
- 2 **What is meant by canyons?**
 - They are deep valleys carved by flowing water.

4

A) Choose the correct answer:

- Each of the following plays a role in erosion process, **except**
 - a) wind
 - b) water
 - c) **sunlight**
 - d) Earth's gravity

B) Answer the following questions:

1 Look at the opposite figure, then complete:

- The opposite figure results from the effect of **weathering**.

2 Mention one difference between the use of wind to generate electricity and the use of water to generate electricity.

- **Water is used in places where dams are built on rivers, while wind is used in places with strong winds.**



1 A) Put (✓) or (X):

- The use of water to generate electricity depends on where boats sail in rivers. (X)

B) What happens when ...?

- 1 Sunlight falls on solar panels.
 - The solar energy of the Sun is converted into electrical energy.
- 2 Water freezes and melts in the cracks of rocks many times for long periods.
 - Causing breakdown of rocks into small parts due to mechanical weathering.

2 A) Cross out the odd word:

- Sun – Wind – Water – Coal.

B) Answer the following questions:

- 1 **Compare between:** Mechanical weathering and Chemical weathering. (in terms of definition).

Point of comparison	Mechanical weathering	Chemical weathering
Definitions	It is the breaking down of rocks due to the effect of physical factors.	It is the change of the structure of rocks due to chemical reactions.

- 2 Erosion and deposition are linked processes. **Explain.**
 - Because eroded rocks must be deposited over time.

3 A) Write the scientific term:

- A turbine in which the kinetic energy of moving water is used to generate hydroelectric energy. (Water turbine)

B) Give a reason for:

- 1 Iron in rocks may rust.
 - Due to the reaction between iron and oxygen of air.
- 2 Wind turbines are built in coastal areas or deserts.
 - Because the wind is stronger and blows more often, while buildings in cities block the wind.

4 A) Complete the following sentence:

- Old windmills are **shorter** than modern wind turbines.

B) Look at the opposite figure, then complete:

- 1** Figure (1) represents **limestone cave** which is an example of the **chemical** weathering.
- 2** Figure (2) represents **delta** which is an example of the **deposition** process.



Figure (1)



Figure (2)

1 A) Complete the following sentence:

- Dams are built on rivers in order to generate **hydroelectric** energy.

B) What is the type of weathering?

- 1 Water dissolves some minerals in rocks. (Chemical weathering)
- 2 Animals digging tunnels. (Mechanical weathering)

2 A) Cross out the odd word:

- **Acid rain** – Wind – Plant roots – Temperature.

B) Answer the following questions:

- 1 What is meant by delta?
 - It is a fan-shaped mass of mud and other sediments formed where a river enters a large body of water.
- 2 Mention the disadvantages of using windmills.
 - Sometimes, the wind does not blow and the windmills do not move, so they are unable to do their job.

3 A) Put (✓) or (X):

- Chemical weathering causes greater changes than mechanical weathering. (✓)

B) Give a reason for each of the following:

- 1 Formation of sand dunes on a beach.
 - This occurs due to the effect of weak winds.
- 2 Flooding of water plays an important role in the erosion process.
 - Because floods carry sand, soil, and rocks downstream.

4

A) Choose the correct answer:

- Water expands when it freezes, which means
 - a) it will evaporate
 - b) its temperature increases
 - c) its volume decreases
 - d) its volume increases

B) What happens when...?

- 1 The acid rain falls on rocks.
 - It dissolves minerals found in rocks, causing the breakdown of rocks.
- 2 The water of a river flows downhill. (in terms of change of energy).
 - The potential energy of river water is converted into kinetic energy.

1 A) Cross out the odd word:

- Oxygen – Lichens – **Plant roots** – Acid rains.

B) Compare between:

- 1 The formation of sand dunes and the formation of canyons.

Point of comparison	Sand dunes	Canyons
The formation	They are formed through the deposition process by the effect of wind.	They are formed through the erosion process by the effect of water.

- 2 Water turbines and solar panels. (in terms of source of energy that is used to operate them and the produced energy).

Point of comparison	Water turbines	Solar panels
Source of energy that is used to operate them	The movement of water as a source of energy.	Solar energy coming from the Sun.
The produced energy	Electrical energy	Electrical energy

2 A) Put (✓) or (X):

- The Nile River delta has a rectangular shape.

(X)

B) Answer the following questions:

- 1 Give a reason for: The shape of coastal rocks changes after many years.
 - Because some parts of them may be broken down by water or wind.
- 2 What is meant by hydroelectricity?
 - It is a type of electrical energy generated by water turbines in dams.

3 A) Correct the underlined word:

- Chemical weathering takes place when friction occurs between sand and rocks.

(Mechanical)

B) Answer the following questions:

- 1 Mention the main processes that change Earth's surface.
 - Weathering, erosion, and deposition processes.
- 2 Give an example for: A tiny plant-like organism produces acid that breaks down rocks.

(Lichens)

4 A) Write the scientific term:

- It is a device that uses the wind to rotate its blades and generate electricity.

(Wind turbine)

B) What happens when ...?

- 1 Water of seas and rivers evaporates, then condenses in the atmospheric air.

- Clouds are formed and rain may fall.

- 2 A red-colored rust is formed on some rocks.

- These rocks become weak and can be broken down easily due to chemical weathering.

حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

اختبار شهر ابريل



Revision on Concept 3.3

Renewable Energy Resources

1 Definitions:

Renewable energy resources	They are energy resources that include wind, water, and solar energy.
Hydroelectricity	It is a type of electrical energy generated by water turbines in dams and waterfalls.
Evaporation	It is a process in which water changes into water vapor.
Condensation	It is a process in which water vapor changes into water.

2 Importance:

Generator	It is a device that turns kinetic energy into electrical energy.
Dam	It is a structure built on a river that controls the water flow and increases its potential energy.

3 Give a reason for:

- ① Dams are built on rivers.
 - To control the flow of water and increase the gravitational potential energy of water and generate hydroelectricity.
- ② Modern water turbines are connected to generators.
 - To generate hydroelectric energy.

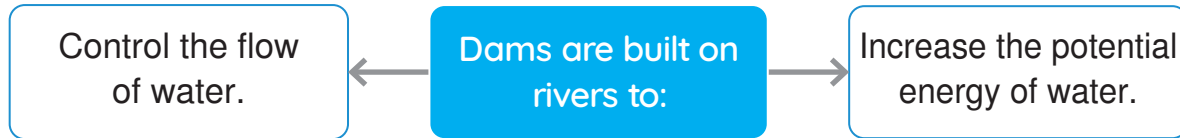
4 What happens if:

- The water of a river starts to flow downhill? (According to the change of energy)
The potential energy of the water changes into kinetic energy to rotate the water turbines and generate hydroelectricity.

5 Summary

Hydroelectricity (Hydroelectric energy)

It is a type of electrical energy generated by water turbines in dams.



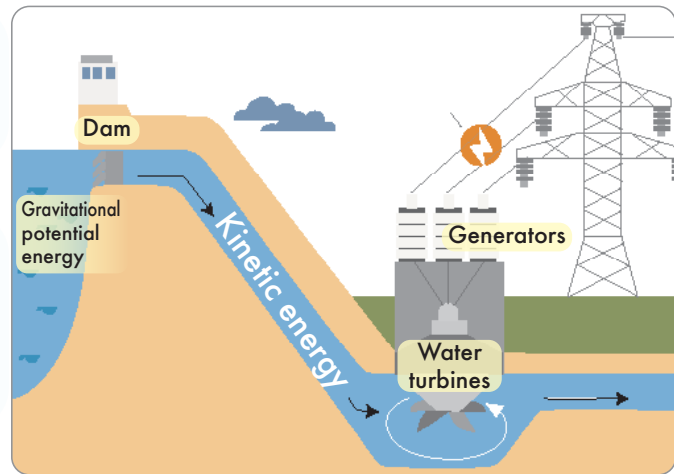
How can water be used to generate electricity ?

1 A hydroelectric dam holds back the flow of water to increase its **potential energy**.

2 As water flows downhill by the effect of **gravitational force**, its **potential energy** is converted into **kinetic energy**.

3 The **kinetic energy** transfers from the flowing water to the water turbines, causing them to rotate, to operate generators to generate **electricity**.

4 Electricity is transferred to cities through long electric wires.



P.O.C	 1 Wind Turbines	2 Water Turbines 
Difference	They are placed in windy places.	They are placed in places where dams are built on rivers and waterfalls.
Similarities	- Both of them are renewable resources. - Both of them use kinetic energy to turn turbines. - Both of them are used to generate electricity.	

Revision on Concept 4.1

Breaking Down and Moving Rocks

1 Definitions:

Weathering	It is the process of breaking down rocks into small (tiny) particles.
Weather	It is the condition of the atmosphere at a specific place and time.
Mechanical weathering	It is the process of breaking down rocks without a change in their structure due to physical factors.
Chemical weathering	It is the process of breaking down rocks with a change in their structure due to chemical reactions.
Lichens	They are tiny-like plants that live on rocks and produce acids on them, causing them to break down.
Oxygen gas	It is the gas that reacts with iron in rocks, forming a red-colored rust on them.
Acid rain	It is a type of rain that dissolves the minerals of rocks, causing their breakdown.
Erosion	It is the process of moving small particles of sand, soil, or rocks from one place to another.
Deposition	It the process of laying down sediments in a new place after their erosion.
Gravity	It is an eroding factor that pulls the rocks down mountainsides.
Sediments	They are solid particles of sand, rocks and soil that are moved by gravity, wind, and water from one place to another.

2 Give a reason for:

① The Earth's surface changes from time to time.

- Because of many factors, such as wind, water, and weather.

- ② Wind is one of the factors that changes the Earth's surface.
- Because it can break down rocks and move small rocks from one place to another.
- ③ Sea waves are factors that can change landforms.
- Because waves can move sand from one place to another.
- ④ The shape of coastal rocks changes after many years.
- Because some parts of them may be broken off by the sea waves or wind.
- ⑤ The iron in rocks may rust.
- Because oxygen gas can react with the iron in rocks, forming red-colored rust, so the rocks become weaker and break down easily.
- ⑥ Plants' roots may cause the breakdown of rocks.
- Because plants' roots grow inside the cracks of rocks, they become wider and the rocks break down easily.
- ⑦ Lichens may cause the breakdown of some rocks.
- Because they produce acids on rocks as they grow, these acids dissolve minerals in the rocks, so the rocks become weaker and break down easily.
- ⑧ It is hard to see weathering in action.
- Because it takes a long period of time to happen.
- ⑨ Chemical weathering causes a greater change to rocks than mechanical weathering.
- Because chemical weathering forms a completely new, different substance, while mechanical weathering breaks down rocks only.
- ⑩ Small sand dunes are formed on sea beaches.
- Due to the deposition of sand carried by gentle winds.
- ⑪ Gravity is one of the natural factors that causes erosion.
- Because gravity pulls the broken rocks down mountainsides.
- ⑫ Erosion and deposition are connected (linked) processes.
- Because when the small pieces of rocks are eroded, they must be deposited.

3 What happens if:

① Sea waves hit a sandcastle?

- The sandcastle will disappear after a short period of time.

② The oxygen reacts with the iron of some rocks?

- A red-colored rust will be formed, so the rocks become weaker and they are broken down easily.

③ Water freezes and inside the cracks of rocks?

- The cracks become wider, so the rocks break down easily.

④ Acid rain falls on rocks?

- The acid rain will dissolve the minerals in the rocks, so they become weaker and break down easily.

⑤ The lichens growing on rocks produce acids?

- The acids dissolve the minerals in the rocks, so the rocks become weaker and break down easily.

⑥ A plant's root grows inside the cracks of some rocks?

- The cracks become wider, so the rocks break down easily.

⑦ A river carrying sediments meets a sea?

- A delta is formed by the deposition process.

4 Summary

The Earth's surface always changes over time.

Some changes are **very fast**.

- The disappearance of a sandcastle when water waves hit it after few minutes.



Some changes are **very slow**.

Such as:

- The breakdown of some parts of coastal rocks after many years.



Similarities

- Both have **steep needle-like parts** and **sloping sides at the bottom**.
- They are affected by **water** and **wind**.

Canyons

They are deep valleys carved by the flowing water.

Shape:

- A canyon has **steep needle-like parts** and **slopes at the sides**.

Time of Formation:

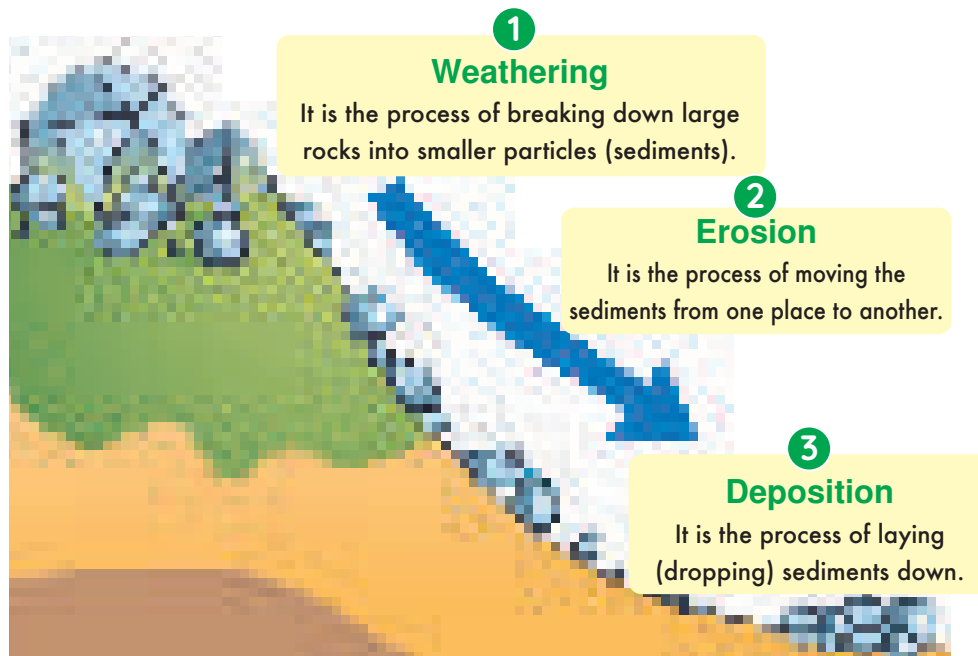
- A canyon takes **millions** of years to be formed.

Way of Formation:

- A canyon is formed by the action of **water**.



- There are **three** main processes that can change the Earth's surface.



1 Weathering:



Weathering

It is the process of breaking down rocks into small (tiny) particles.

Weathering may cause:



1

The breakdown of statues.

2

The removing of paint on buildings.



- **Weather** is the condition of the atmosphere at a specific place and time.
- Knowing the weather helps us decide what to wear outside.
- Many weather condition, such as wind, rain, and temperature, may cause weathering.

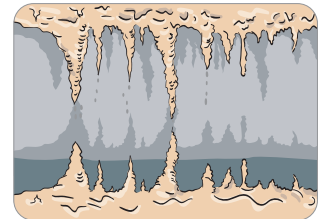
Types of Weathering

P.O.C	Chemical Weathering	Mechanical Weathering
Definition	It is the process of breaking down rocks with a change in their structure (nature) due to chemical reactions.	It is the process of breaking down rocks without a change in their structure (nature) due to physical factors.

Factors of Chemical Weathering

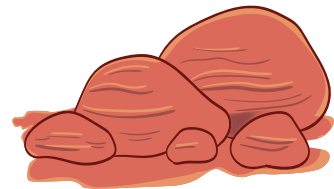
1 Water:

- Water dissolves **some minerals** in rocks.
- Dissolved minerals combine again to form new shapes, such as in **limestone caves**.



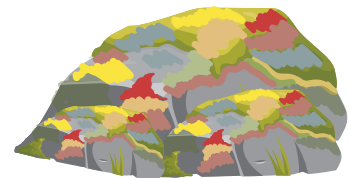
2 Oxygen Gas:

- Oxygen** in the air reacts with the **iron** found in some rocks, forming **red-colored rust**.
- This reaction weakens rocks, causing them to break down easily.



3 Acids Produced by Lichens:

- Lichens** produce acids on rocks as they grow.
- These acids dissolve the minerals found in the rocks.
- The rocks become weaker and break down easily.



4 Acid Rain:

- Acid rain dissolve the minerals found in the rocks.
- The rocks become weaker and break down easily.



Factors of Mechanical Weathering

1 Temperature:

- Water and temperature work together to break rocks.

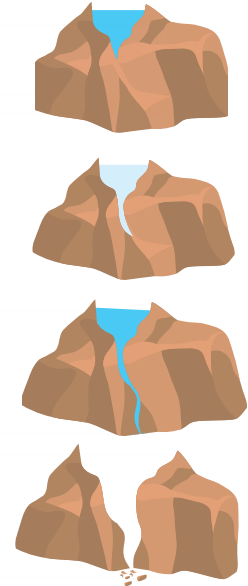
- 1 Water flows into the tiny cracks in the rocks.

When the temperature becomes very cold,

- 2 water **freezes**, forming ice that **expands**, so the cracks become **wider**.

- 3 When the temperature increases, ice **melts**, and water fills the newly formed cracks again.

- 4 The cycle of melting and freezing continues until rocks are broken down.



2 Wind:

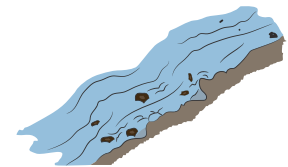
- Sand and wind wear down large rocks.

- 1 Wind pushes sand on the rocks' surface.
- 2 Friction occurs between the sand and the rocks.
- 3 This causes the rocks to smooth out and break down.



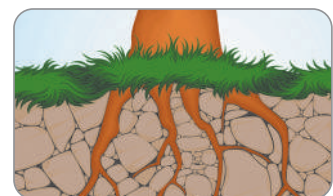
3 Water:

- Flowing water, that carries **small gravel** and **sand**, collide with large rocks.
- Large rocks are broken down and their rough edges become smooth.



4 Plant Roots:

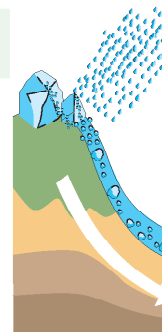
- 1 Plant roots grow inside the cracks of rocks.
- 2 The cracks become wider.
- 3 The rocks are broken down.



2 Erosion:

Erosion

It is the process of moving small particles of sand, soil, or rocks from one place to another.



Factors Causing Erosion

A

Gravity

B

Wind

C

Water

Gravity

- Gravity pulls rocks down mountainsides.



Wind

- The wind carries sand grains from one place to another.
- **Gentle winds** carry sand grains for a short distance (about one meter).
- **Stronger winds** or **hurricanes** carry more sand grains for over greater distances.

Water

- **Rivers** and **floods** erode rocks and soil from their banks.
- **Waves** pull sand away from beaches.
- **Rain** washes the soil on farmland downhill.

Factors
Causing
Erosion

3 Deposition

The action of **water** in deposition:

» Running water in rivers play an important role in **deposition process**.

When a river carrying sediments meets a sea,

these sediments are deposited, forming a **delta**, such as **Nile River Delta**.



Delta:

It is a **fan-shaped (triangle-shaped) landform** that has a mass of mud and sediments formed when a river enters a large body of water.

The action of **wind** in deposition:

As the wind **blows**,

it picks up sand and carries it through air.

When the wind **stops**,

the sand falls on the ground and deposits.



Weak wind

They can form small sand dunes.

Sand dunes on a beach



Strong wind

They can form large sand dunes.

Examples:

Sand dunes in:

Western Desert of Egypt

Rub' Al Khali in Arabian Peninsula



1 A) Complete the following sentences:

- causes both mechanical and chemical weathering.

B) Write the scientific term:

1. It is the energy that makes turbines and generators in dams works. (.....)
2. It is a deep valley that is carved by flowing water. (.....)
3. It is a gas in the air that combines with the iron in some rocks and causes their weakness. (.....)

2 A) Read the following statements then correct the incorrect ones:

1. Canyons are formed in a short period of time.

.....

2. Water and wind are factors that shape the surface of Earth.

.....

B) Give a reason for:

- Sea waves cause beach erosion.

.....

3 A) Choose the correct answer:

- The water from rivers above the dam stores energy.
- | | |
|-----------------------------|----------------|
| (a) Gravitational potential | (b) chemical |
| (c) Kinetic | (d) Electrical |

B) What happens if:

1. The water of a river falls on water turbines? (According the change of energy)

.....

2. Lichens grow on rocks?

.....

1 A) Complete the following sentences:

- If you are asked to heat food in a safe, clean, and inexpensive way, you might use a

B) Write what the following statement refers to:

1. It is the process in which sand and rocks move from place to another. (.....)
2. It is a type of weathering that occurs due to the cycle of melting and freezing of ice inside rocks. (.....)
3. It is a type of electrical energy generated by turbines in dams. (.....)

2 A) Classify the following into chemical or mechanical weathering:

1. Plant roots grow inside the cracks in rocks. (.....)
2. Dissolving of minerals in limestone cave. (.....)

B) Give a reason for:

- Iron in rocks may rust.
-

C) What happens if:

- The water of a river starts to flow downhill? (According to the change of energy)
-

3 A) Read the following statements then correct the incorrect ones:

- Stronger winds will blow less sand and move it farther.
-

B) Cross the odd word:

- Weathering – Digestion – Erosion – Deposition (.....)

C) Mention one use of hydroelectric dam.

.....

1 A) Complete the following sentences:

- Dunes are formed due to and processes.

B) Write Scientific term:

1. It is a large canyon that is located in Oman. (.....)
2. It is a structure that is built on river to control the flow of water. (.....)

C) Mention one difference between wind turbines and water turbines.

.....

2 A) Put true or false:

- Gravity pulls rocks down mountainsides. ()

B) Give a reason for:

- Sometimes wind turbines are useless.

.....

C) Mention three factors that cause erosion.

.....

3 A) Choose the correct answer:

1. Dissolving minerals forming limestone cave is an example for

Ⓐ weathering Ⓑ deposition Ⓒ erosion Ⓓ weather

2. The condition of atmosphere including temperature, wind, and rain is known as

Ⓐ weathering Ⓑ weather Ⓒ erosion Ⓓ deposition

B) What happens if:

- Water finds its way into the rock cracks?

.....

C) Mention the role of oxygen in chemical weathering.

.....

1 A) Complete the following sentences:

1. When water freezes, its volume
2. The cycle of and continues until the rock breaks down.

B) Write what the following statement refers to:

1. They are small solid materials such as sand, soil and small pieces of rocks.
(.....)
2. It is a triangle-shaped mass of sediments formed where a river meets a larger body of water, such as a sea.
(.....)

2 A) Mention the difference between chemical and mechanical weathering.

.....

B) Give a reason for:

- We cannot see weathering process in action.

.....

C) What happens if:

- A river carrying sediments meets a sea?

.....

3 A) Put true or false:

- Living organisms cause mechanical weathering and chemical weathering. ()

B) Mention:

1. One difference between the formation of sand dunes and formation of delta.

.....

2. Two factors that cause chemical weathering of rocks.

.....

Models answers

April Tests } Model Exam (1)

Q 1 A) Complete the following sentences:

- Water

B) Write the scientific term:

- 1- kinetic energy 2- Canyon
- 3- Oxygen gas

Q 2 A) Read the following statements then correct the incorrect ones:

- 1- Canyons are formed over a very long period of time.
- 2- ✓

B) Give a reason for:

- Because sea waves move sand and small rocks from one place to another.

Q 3 A) Choose the correct answer:

- a

B) What happens if:

- 1- Kinetic energy changes into hydroelectric energy.
- 2- It produces acids that dissolve minerals in rocks so the rock becomes weaker and break down easily.

April Tests } Model Exam (2)

Q 1 A) Complete the following sentences:

- concave mirror

B) Write what the following statement refers to:

- 1- Erosion
- 2- Mechanical weathering
- 3- Hydroelectric energy

Q 2 A) Classify the following into chemical or mechanical weathering:

- 1- Mechanical weathering
- 2- Chemical weathering

B) Give a reason for:

- Because oxygen in air reacts with iron in rocks forming red colored rust.

C) What happens if:

- Gravitational potential energy changes into kinetic energy.

Q 3 A) Read the following statements then correct the incorrect ones:

- Stronger winds will blow more sand and move it farther.

B) Cross the odd word:

- Digestion

C) • It is used to generate hydroelectricity using the kinetic energy of water.

April Tests } Model Exam (3)

Q 1 A) Complete the following sentences:

- erosion - deposition

B) Write Scientific term:

- 1- Wadi Nakhr 2- Hydroelectric dam

C) What happens if:

- Wind turbines are placed in windy places, while water turbines are placed in areas of dams.

Q 2 A) Put true or false:

- ✓

B) Give a reason for:

- Because sometimes wind doesn't blow, and wind turbines can't do their function.

C) • Wind – water – gravity

Q 3 A) Choose the correct answer:

- 1- a 2- b

B) • When water freezes and expands and makes the crack of rocks become wider, cycle of freezing and melting causes breaking down of rock (mechanical weathering).

C) • Oxygen reacts with iron in rocks forming red-colored rust.

April Tests { Model Exam (4)

Q 1 A) Choose the correct answer:

- d

B) Write the scientific term:

- 1- Weathering process 2- Lichens
- 3- Weather

Q 2 A) • Acid rain.

B) Put true or false:

- ✓

C) Give a reason for:

- Because when rocks are eroded, they must eventually be deposited.

Q 3 A) • The process of moving small particles of rocks from place to another.

- B) 1- Weathering – erosion – deposition**
2- It collects and focus sunlight to heat metal pots and to cook food.

April Tests { Model Exam (5)

Q 1 A) Complete the following sentences:

- 1- increases 2- melting – freezing

B) Write what the following statement refers to:

- 1- Sediments 2- Delta

Q 2 A) • Chemical Weathering is the process of breaking down rocks with a change in their structure due to chemical reactions.

- Mechanical Weathering is the process of breaking down rocks without a change in their structure due to the effect of physical factors.

B) • Because weathering happens over long periods of time.

C) • Delta is formed.

Q 3 A) Put true or false:

- ✓

B) Mention

- 1- • Sand dune is formed by deposition by wind.
• Delta is formed by deposition by water.
- 2- Acid rain – Oxygen gas.

5

Revision on

Concept 1

1 Choose the correct answer:

- 1 Steep valleys formed due to flowing water erosion are called _____.
a. hills b. sand dunes c. canyons d. deltas
- 2 A canyon may take _____ to be formed.
a. minutes b. hours c. days d. years
- 3 All the following are reasons for chemical weathering, except _____.
a. water b. plant roots c. acid rain d. oxygen gas
- 4 _____ may cause chemical or mechanical weathering.
a. Lichens b. Oxygen c. Water d. Rocks
- 5 Which of the following examples represents mechanical weathering?
a. Red-colored rust on rocks b. Acid rain falls on rocks.
c. Roots grow inside rocks. d. Water dissolves minerals.
- 6 Sand is formed due to the breaking down of _____.
a. wood b. plastic c. glass d. rocks
- 7 Limestone caves are formed due to the combination of _____.
a. dissolved minerals b. insoluble minerals
c. red-colored rust d. acid rain
- 8 _____ is the process by which sediments are carried to another place.
a. Deposition b. Erosion c. Weathering d. Melting
- 9 Dissolving minerals from rocks to recombine with new substances is an example of _____.
a. mechanical weathering b. weathering by wind
c. chemical weathering c. erosion
- 10 All the following are processes that change the Earth's surface, except _____.
a. erosion b. digestion c. weathering d. deposition
- 11 Lichens produce _____ that dissolve(s) minerals found in rocks.
a. oxygen b. rain c. water d. acids

Final Revision

- 12 The process of breaking down rocks on the Earth's surface is called
a. erosion b. weathering c. decomposition d. deposition
- 13 The force of pulls rocks from the top of the mountain to its bottom.
a. river water b. seawater c. rainwater d. gravity
- 14 erode(s) rocks and soil from their banks.
a. Rivers b. Mountains c. Rainwater d. Gravity
- 15 When a river carrying sediments meets a sea, a is formed.
a. sand bar b. sand dune c. delta d. sand pile
- 16 Gentle wind can carry sand grains for distances.
a. short b. long c. huge d. very long

2 Put (✓) or (X):

- 1 The Earth's surface changes from time to time. ()
- 2 All changes to the Earth's surface take hundreds of years. ()
- 3 Canyons take millions of years to be formed. ()
- 4 The Earth's surface never changes. ()
- 5 The deposition process takes place before the erosion process. ()
- 6 We can see weathering in action everywhere around us. ()
- 7 Plant roots help in the formation of rocks. ()
- 8 Rocks become stronger when iron found in them rusts. ()
- 9 Wind is one of the agents that cause weathering. ()
- 10 Chemical weathering causes greater changes to rocks than mechanical weathering. ()
- 11 Sometimes you can see erosion happening. ()
- 12 The deposition process never changes the shape of the Earth's surface. ()
- 13 The formation of sand dunes in the Eastern Desert in Egypt is due to the movement of the wind. ()
- 14 Floods are one of the factors that cause water erosion. ()
- 15 The erosion process is usually followed by the weathering process. ()

3 Write the scientific term:

- 1 They are deep valleys carved by the flowing water. (.....)
- 2 It's the process of moving rocks from one place to another. (.....)
- 3 It's the process of laying sediments down. (.....)
- 4 It's the kind of weathering that changes the structure and color of rocks. (.....)
- 5 They are tiny, like plants, that live on rocks and produce acids on them. (.....)
- 6 It is the gas that causes the red-colored rust on some rocks. (.....)
- 7 It is a type of weathering that occurs in rocks and leads to the formation of a completely different material. (.....)
- 8 It is a type of weathering that breaks rocks down without changing their matter. (.....)
- 9 It is an eroding factor that pulls rocks down mountainsides. (.....)
- 10 It is an eroding factor that moves rocks from their banks downstream. (.....)
- 11 It is the process that lays sand down when the wind stops blowing. (.....)
- 12 It is a landform of deposited sediments formed when a river meets a sea. (.....)

4 Complete the following using the words between the brackets:

A (Mechanical - Acid rain - chemical - oxygen - Acids - iron - plant roots)

- 1 The melting and freezing cycles of water have the same effect as, as they make the cracks in the rocks wider.
- 2 produced by lichens may dissolve rocks.
- 3 has the same effect of lichens on rocks.
- 4 weathering and weathering are types of weathering.
- 5 When the in air reacts with in rocks, a red-colored rust is formed.

B (water - Nile Delta - hurricane - deposition - gentle wind - Egyptian Western Desert)

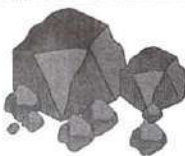
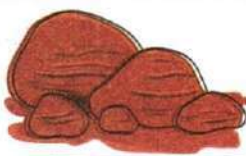
- 1 A forms a small sand dune, while a forms large sand dunes like that in the
- 2 is a fan-shaped mass of mud and sediments.
- 3 Wind,, and gravity are natural factors that control erosion process.
- 4 The process of laying down sediment after its erosion is called

5 Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Lichens	a. causes mechanical weathering of rocks.
2 Water	b. causes the red-colored rust on a toy car.
3 Oxygen	c. produce acids as they grow on rocks.
4 Melting and freezing	d. may cause both types of weathering.

1 2 3 4

6 Study the following figures, then complete the following sentences:

			
Figure (1)	Figure (2)	Figure (3)	Figure (4)

- 1 Figure (.....) represents a living organism that causes mechanical weathering.
- 2 Figure (.....) represents a living organism that causes chemical weathering.
- 3 Oxygen gas has a bad effect on rocks in figure (.....).

7 Give reasons for:

- 1 The Earth's surface is always changing.
.....
- 2 Oxygen in the atmosphere has a bad effect on some rocks.
.....
- 3 Lichens dissolve rocks as they grow.
.....
- 4 Chemical weathering causes greater changes to the rocks.
.....
- 5 Erosion and deposition are linked processes.
.....

8 What happens if?

- 1 Oxygen gas reacts with iron rocks, forming a red-colored rust?
.....
- 2 Acid rain falls on rocks?
.....
- 3 The lichens that grow on rocks produce acids?
.....
- 4 Plant roots grow inside rocks' cracks?
.....

1 Choose the correct answer:

- 1 A canyon may take of years to be formed.
 a. hundreds b. tens c. millions d. couple
- 2 Canyons can be formed in many ways, including
 a. weathering only b. erosion only
 c. weathering and erosion d. erosion and deposition
- 3 If the rain falls over a canyon several times per year,
 a. its depth increases b. its depth decreases
 c. it becomes flat d. not be affected
- 4 The shape of a rock gets worn and rounded by the effect of the process.
 a. weathering d. deposition c. erosion d. photosynthesis
- 5 is/are evidence of deposition.
 a. A rounded, worn rock b. A patch of sand on the ground
 c. An area with canyons d. Red-colored rocks
- 6 A river may make a new at its end through the process.
 a. mountain, deposition b. canyon, erosion
 c. land, deposition d. land, weathering
- 7 pulls rainwater downhill, forming small streams.
 a. Magnetism b. Gravity c. Sunlight d. Wind
- 8 All the following factors affect the shape of the valley, except
 a. the river's size b. the river's speed
 c. the rocks' type d. the rocks' color
- 9 A is a deep valley with high, steep sides.
 a. hill b. mountain c. canyon d. dune
- 10 are lowland areas with gently-sloped sides.
 a. Valleys b. Deltas c. Canyons d. Dunes
- 11 When a river meets a sea or an ocean, a landform known as a is formed.
 a. canyon b. volcano c. mountain d. delta

- 12 All the following are created by the water of rivers or streams, except
 a. deltas b. canyons c. valleys d. sand dunes
- 13 Silt carried by water contains all the following, except
 a. sand b. clay c. rocks d. glass
- 14 A sand dune is formed by the process, then the process.
 a. deposition, erosion b. erosion, weathering
 c. erosion, deposition d. deposition, weathering
- 15 Which of the following factors helps in the formation of sand dunes?
 a. Water b. Wind c. Light d. Heat
- 16 When a rock blocks the path of flying sand, a may be formed.
 a. dune b. river c. canyon d. delta

2 Put (✓) or (X):

- 1 Wadi Rum in Jordan is an example of a sand dune. ()
- 2 All canyons have the same shape, texture, and color. ()
- 3 The sides of the canyon at the beginning of its formation are gently-sloped. ()
- 4 Understanding the formation of landforms helps us predict future changes of landforms. ()
- 5 It is better to build your house on a hill that is eroding. ()
- 6 A river never changes its path, so it's safe to build a house near any river. ()
- 7 When a river moves down a steep slope, its speed decreases. ()
- 8 Most valleys are formed due to the erosion of many sediments and their transfer far away. ()
- 9 The shape of the valley depends on the type of its rocks. ()
- 10 A slow-moving river has a lot of energy, so it causes more erosion. ()
- 11 A delta is formed when the speed of the river water increases. ()
- 12 Silt carried by a river contains large bits of sand and clay. ()
- 13 Sand dunes are formed when a rock blocks water-blown sand. ()
- 14 Sand dunes are formed by the deposition process only. ()

Final Revision

- 15 The formation of sand dunes in the Eastern Desert in Egypt is due to the movement of wind. ()
- 16 Dunes are formed at the bottom of seas. ()

3 Write the scientific term:

- 1 It's a deep valley that formed due to the weathering and erosion of wind and water. ()
- 2 It's a force that pulls rainwater downhill, forming small streams. ()
- 3 It's the world's largest canyon, located in the USA. ()
- 4 They are often found at the bottom of both canyons and valleys. ()
- 5 It's a sediment carried by a river that contains sand, clay, and rock materials. ()
- 6 It's a fan-shaped land that is formed when a river meets a sea. ()
- 7 It's a process that causes the carving of rocks into different shapes by wind-blown sand. ()

4 Complete the following using the words between the brackets:

A (small canyon - impression - V-shaped - water stream - brown and black-colored)

- 1 When the rain falls on a flat sandy land, it will leave an _____.
- 2 Wadi Nakhr is a _____ canyon.
- 3 Wadi Rum and colored canyon in Sinai are _____ canyons.
- 4 In the beginning of a _____ formation, plants and trees grow at the two sides of it due to the effect of the _____.

B (less - high - more - gravity - increases - sediments - many layers)

- 1 Rainwater is pulled downhill, forming a small stream due to _____.
- 2 When the water of a river moves downhill on a steep slope, the water speed _____, which causes _____ erosion.
- 3 A small stream causes _____ erosion than a large river.
- 4 The force of rushing water erodes a lot of _____ of a mountain and carries them away.
- 5 Walls of canyons are very _____ and are composed of many _____.

C (deposition - canyon - fan - decreases - increases - delta)

- 1 A is formed by the erosion process, while a is formed by the deposition process.
- 2 The Nile River Delta has a shape.
- 3 When the stream water speed, it causes of sediments.
- 4 When the force of blowing wind, the blown sand is carried for a longer distance.

5 Choose from column (A) what suits it in column (B):

A

Column (A)	Column (B)
1 Wadi Nakhr	a. is a black and brown canyon in Oman.
2 Wadi Rum	b. is a V-shaped canyon in Jordan.
3 Small canyon	c. is a reddish canyon in Thailand.

1 2 3

B

Column (A)	Column (B)
1 Erosion	a. is the fine particles of clay, sand, and rock materials.
2 Deposition	b. occurs when a stream water rushes quickly downhill a mountain.
3 Sand dunes	c. are hills of sand usually seen in groups and they may cover large areas.
4 Silt	d. occurs when a stream water speed slows down at the end of a river.

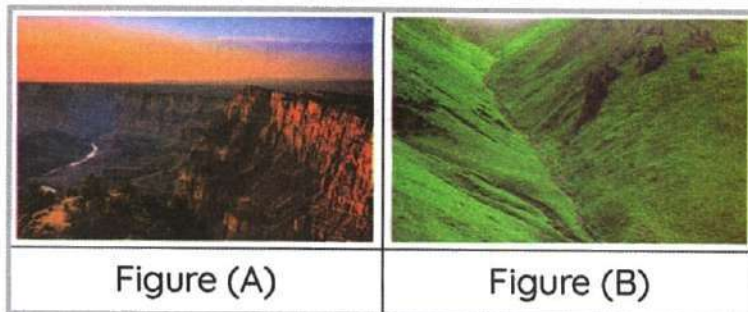
1 2 3 4

6 Cross out the odd word:

Mountain - Valley - Gravity - Canyon

()

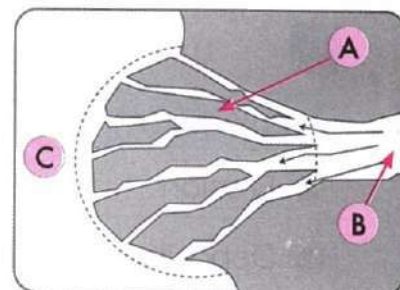
7 Study the following figures, then put (✓) or (X):



- The landform in figure (A) has gently-sloped sides. ()
- The landform in figure (B) may be surrounded by some plains between mountains. ()
- Both landforms are formed due to erosion carried by rivers. ()
- The walls of the landform in figure (A) are higher than those in figure (B). ()

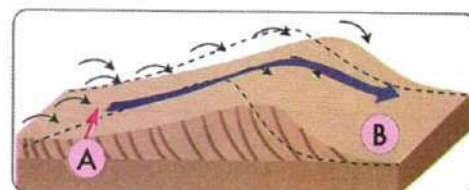
8 Study the following figure, then choose the correct answer:

- The area (A) would become a
(delta - canyon) due to the
(erosion - deposition) process.
- The (area "C" - area "B")
could be a sea or a lake.
- The (area "C" - area "B") is a river.



9 Study the following figure, then complete:

- The erosion of sand occurs in area
- The deposition of wind-blown sand occurs in area



10 Give reasons for:

1 It is not safe to build a house close to a river.

2 Valleys and canyons are formed in the same way.

3 Sand dunes are formed in a desert.

11 What happens if?

1 A water stream flows over a flat land?

2 A lot of rain falls on a small canyon?

3 Small streams of water are joined together? (concerning erosion)

4 A river carrying sediments meets a sea?

5 Wind-blown sand grains hit a big rock in the desert?

حمل الآن

مجاناً وحصرياً

المراجعة رقم (4)

اختبار شهر ابريل



Science

Exam

1

1 A) Choose the correct answer:

- Dissolving metals forming rocks is an example of
- (a) mechanical weathering (b) erosion by wind
(c) deposition in rivers (d) chemical weathering

B) Give reason for each of the following:

- (1) Water is a factor of weathering.



.....

- (2)  The waves cause beach erosion.



.....

- (3) Weather factors change Earth's surface.



.....

- (4) Deposition is an important process.



.....

2 A) Complete the following sentence:

Paint peeling is a result of the process of

B) What happens when..?

- (1) Winds blow in the desert.



.....

- (2)  Water infiltrates and accumulates within the fine-grained rocks.



.....

- (3) Water inside rock pores freezes.



.....

- (4) Water full of small bits of gravel and sand scours rough edges off boulders.



.....

3 A) Write (True) or (False) for each of the following:

- (1) A canyon is formed by wind. ()
- (2) The greater the water flow, the greater the weathering. ()

B) Mention:

- (1)  The difference between weathering and erosion.

▶

- (2)  The difference between erosion and deposition and rearrange the two processes.

▶

- (3)  How does a delta form?

▶

4 A) Write the scientific term:

- (1) Breaking apart rocks because of lichens plant. (.....)
- (2) The force that pulls the rocks down the mountain. (.....)

B) How can humans reduce the impact of erosion on beaches?

▶

C) How was the colored canyon in Sinai formed?

▶

D) When does deposition occur?

▶

العلوم
للصفوف 4, 5, 6
الابتدائي



MATHEMATICS
GRADE 1st TO 3rd
PRIMARY SCHOOL



Science Exam 2**1 A) Choose the correct answer:**

 Dunes can be of meters tall.

- (a) tens (b) hundreds (c) thousands (d) millions

B) Give a reason for each of the following:

- (1) You can see the erosion process happening during flash floods or hurricanes.



- (2)  Oxygen causes chemical weathering.



- (3) Role of limestone in making chemical weathering.

**C) Explain how rivers can change the landscape.****2 A) Complete the following sentence:**

Water inside a rock's pores freezes when the temperature drops, expands, and causes

B) What happens when...?

- (1)  Acid rain falls on the rocks.



- (2) There is no wind.



- (3)  The water travels down a steep slope.



- (4)  Erosion and deposition processes happen at the same time.



3 A) Write (True) or (False) for each of the following:

- (1) Erosion and weathering change the shape of Earth's surface. ()
- (2) Chemical weathering is a change in the shape of the land without changing its composition. ()

B) Mention:

- (1) One difference between chemical and mechanical weathering.

▶

- (2)  How do sand dunes form?

▶

- (3) The factors that affect chemical weathering.

▶

4 A) Write the scientific term:

- (1) Moving fragments of rocks or soil around. ()

- (2) A type of valley. ()

B) What is the relationship between water speed and occurrence of erosion?

▶

C) Compare wind and water as factors of erosion.

▶

D) Give some examples of canyons?

▶

جديد من شركة التأسيس السليم

العلوم
للصفوف 4، 5 و 6
الابتدائي



الدراسات الاجتماعية
للصفوف 4، 5 و 6
الابتدائي



Science Exam 3

1 A) Choose the correct answer:

-  The Nile River Delta is the famous delta in the world.
(a) most (b) least (c) only (d) smallest

B) Give reason for each of the following:

- (1)  Weathering and erosion can change landforms.



.....

- (2)  The Nile River Delta is a suitable place for agriculture.



.....

- (3) Dunes are formed when the winds are weak.



.....

- (4)  Deposition is a very important process in agriculture.



.....

2 A) Complete the following sentence:

-  Rocks and soil are moved around by the effect of

B) What happens when:

- (1) Trees grow beside rocks.



.....

- (2)  Running water can form canyons.



.....

- (3)  Sediments settling.



.....

- (4)  The flowing water does not enter still water.



.....

3 A) Write (True) or (False) for each of the following:

- (1)  The cycle of melting and freezing continues until rock breaks. ()
- (2)  Rivers can change a landform very slowly. ()

B) Explain:

- (1) The process formed when a river meets a sea.
▶
- (2)  How does a canyon form?
▶
- (3) The role of wetland plants and their roots in the deposition process.
▶

4 A) Write the scientific term:

- (1) The process that occurs when sand or rocks are moved from one place to another. ()
- (2) Hills that are made of sand. ()

B) What is the role of sediments in the deposition process?

▶

C) How can a sandstorm help in the deposition process?

▶

D) Compare the canyon and valley in terms of the characteristics of their formation.

▶

Science Exam 4

1 A) Choose the correct answer:

 Deltas are formed by the process.

(a) weathering (b) erosion (c) deposition (d) transportation

B) Give a reason for each of the following:

(1)  There is a relation between erosion and weathering.



(2) The shape of a valley formed depends on some information.



(3)  Weathering and erosion change landforms.



(4)  Gravity has an important role in the formation of a canyon.



2 A) Complete the following sentence:

 The rocks may erode as a result of process.

B) What happens when?

(1)  Rocks are broken into small pieces.



(2) Rocks trap water in the freezing winter



(3)  Rivers dry up



(4)  Erosion and deposition processes happen at the same time.



3 A) Write (True) or (False) for each of the following:

- (1) Water and wind are factors that shape the surface of Earth. ()
- (2)  Fast-moving rivers can cause a lot of erosion. ()

B) Mention the following:

One factor that formed Al-Rub Al-Khali in the Arabian Peninsula.

▶

C) How do sand dunes form?

▶

D) Why sediments settle when the wind calms down.

▶

4 A) Write the scientific term:

- (1) A factor that helped in the formation of a small canyon in Thailand. ()
- (2)  Deep valleys with steep sides. ()

B) Answer the following:

- (1)  What is the relationship between water speed and the occurrence of erosion?
▶
- (2)  Compare the canyon and valley in terms of the characteristics of their formation.
▶
- (3) What factors does the shape of a canyon depend on?
▶

Science Exam 5

1 A) Choose the correct answer:

Wind and sand work together to rocks.

- (a) build (b) erode (c) deposit (d) freeze

B) Give a reason for each of the following:

- (1)  Some rocks appear red.



.....

- (2) The surface of the Earth is always changing.



.....

- (3)  Lichens cause chemical weathering.



.....

- (4) The river's direction affects on the delta formation



.....

2 A) Complete the following sentence:

Coastal rocks are formed over a period of time.

B) What happens when?

- (1)  Oxygen reacts with the iron found inside the rocks.



.....

- (2) Landslides or sandstorms happen.



.....

- (3) Acid rain falls over the building



.....

- (4) The roots of the tree grow between the rocks pores.



.....

3 A) Write (True) or (False) for each of the following:

- (1) The formation of canyons takes place over ten years. ()
- (2)  The larger streams or rivers produce greater change. ()

B) Answer the following:

- (1) What is the difference between erosion and deposition?

▶

- (2)  Describe a way to utilize deposition in agriculture or construction.

▶

- (3) How does a canyon form?

▶

4 A) Write the scientific term:

- (1) A canyon is in the United States. ()

- (2)  Low land areas found between mountains. ()

B) What are the natural factors that influence the shape of the Earth?

▶

C) What is the relationship between water speed and the occurrence of erosion?

▶

D) How does the wind affect the sand?

▶

Exam (1)

- 1 **A)** (d) chemical weathering.
B) (1) Water can seep into cracks, freeze, expand, and break rocks.
(2) Waves pull sand away from beaches.
(3) Wind, water, ice, and heat cause rocks to break down.
(4) Deposition lays down sediment to form new landforms like deltas and dunes.
- 2 **A)** Weathering.
B) (1) Wind picks up sand and carries it, eroding rocks and forming dunes.
(2) Water freezes, expands, widens cracks, and breaks rocks.
(3) Water expands when frozen, causing cracks to widen.
(4) Flowing water smooths the rocks and breaks off rock pieces.
- 3 **A)** (1) False (2) True
B) (1) Weathering breaks rocks into pieces; erosion moves them.
(2) Erosion moves sediment; deposition drops it.
Order: Erosion then Deposition.
(3) A river carries sediment and drops it when it meets still water, forming a delta.
- 4 **A)** (1) Chemical weathering. (2) Gravity.
B) Build walls, plant trees, or reduce wave impact.
C) Water eroded the rock over a long time.
D) When wind or water slows down and drops sediment.

Exam (2)

- 1 **A)** (b) hundreds.
B) (1) Because water or wind erodes the land and the buildings quickly.
(2) Oxygen reacts with iron in rocks, causing rust (chemical weathering).
(3) Flowing water erodes rock and soil over time.
(4) Limestone dissolves in acidic water, changing the rock.
- 2 **A)** cracks to widen.

- B)** (1) Acidic water dissolves parts of the rock (chemical weathering).
(2) Less sand and sediment are moved.
(3) Water moves quickly and erodes more sediment.
(4) Sediment is moved and then dropped in a new close place.
- 3 **A)** (1) True (2) False
B) (1) Mechanical weathering breaks into smaller pieces; chemical weathering changes the rock's material then breaks it.
(2) Wind blows sand up a dune slope, and sand rolls down the other side.
(3) Water, oxygen, and acids.
- 4 **A)** (1) Erosion. (2) Canyon.
B) Faster water causes more erosion.
C) Wind moves sand; water moves soil and rocks.
D) Colored Canyon in Sinai, Grand Canyon in USA.

Exam (3)

- 1 **A)** (a) most.
B) (1) Weathering breaks rocks; erosion moves them; deposition drops them.
(2) The Nile Delta has fertile soil for growing crops.
(3) When wind slows, it drops sand, forming dunes.
(4) Deposition creates fertile land for farming.
- 2 **A)** gravity, wind, water
B) (1) Roots grow into cracks and break rocks (mechanical weathering).
(2) Running water erodes rock and carves deep valleys (canyons).
(3) Sediment is dropped in a new place making a new landform.
(4) No delta forms because sediment is not dropped.
- 3 **A)** (1) True (2) True
B) (1) Delta formation.
(2) Rivers erode rock over millions of years, cutting deep steep-sided valleys.
(3) Wetland plants slow water, and roots trap sediments, increasing deposition.

- 4 **A)** (1) Erosion. (2) Sand dunes.
B) Sediments are dropped and build up new land.
C) Wind carries sand, then stops, and sand falls to the ground.
D) Canyons have steep sides; valleys have gentle slopes.

Exam (4)

- 1 **A)** (c) deposition.
B) (1) Weathering breaks rocks; erosion moves them to new places.
 (2) As it depends on rock type, water speed, age, and size affect valley shape.
 (3) Weathering breaks; erosion moves; deposition drops sediment.
 (4) Gravity pulls water and rocks downhill, helping cut canyons.
- 2 **A)** Weathering.
B) (1) Smaller pieces of rock are formed because the erosion process happens.
 (2) Water freezes, expands, and breaks the rock.
 (3) Erosion slows or stops.
 (4) Sediment is moved and then dropped quickly.
- 3 **A)** (1) True (2) True
B) (1) Wind erosion.
 (2) Wind blows sand up a dune slope, and sand rolls down.
 (3) Wind is not strong enough to carry sand anymore.
- 4 **A)** (1) Water. (2) Canyons.
B) Faster water causes more erosion.
C) Canyons: steep sides, deep; Valleys: gentle slopes, wide.
D) Rock type, water speed, age, and size of river.

Exam (5)

- 1 **A)** (b) Erode.
B) (1) Oxygen reacts with iron in rocks, forming red rust.
 (2) Wind, water, ice, and heat constantly break and move rocks.
 (3) Lichens produce acid that slowly dissolves rock.
 (4) Where the river meets still water, sediment drops and forms a delta.

- 2 **A)** Long.
B) (1) Rust forms (chemical weathering).
 (2) Sediment is moved quickly (erosion).
 (3) Acid rain dissolves parts of buildings (chemical weathering).
 (4) Roots grow and crack the rock (mechanical weathering).
- 3 **A)** (1) False (2) True
B) (1) Erosion moves sediment; deposition drops it. Order.
 (2) Use deposited silt from rivers for farming.
 (3) Rivers erode rock over millions of years, cutting deep steep-sided valleys.
- 4 **A)** (1) Grand Canyon. (2) Valleys.
B) Wind and water.
C) Faster water causes more erosion.
D) Wind picks up sand and moves it; sand hits rocks and wears them down.



حمل الآن

مجاناً وحصرياً

المراجعة رقم (5)

اختبار شهر ابريل



Concept 3 : Renewable energy resources**Week (8)****Lesson 3 and 4 .****Date:** / /**Classroom Performance:****Falling Water**

Water flowing from high elevations can be used to generate electricity by building dams equipped with turbines.

**Think and answer:**

Why are turbines placed in dams?

.....

.....

Write a short paragraph explaining why we should use more hydroelectric power in the future .

.....

.....

.....

Imagine that you are a young engineer and you have designed a device that works by water energy. Draw this device and explain how it works and how it benefits people?

.....

.....

.....

.....

.....

.....

.....

Homework (Performance):

Complete the following statements:

- 1- Wind can be used to
- 2- The gravitational potential energy of rivers water convert to energy.
- 3- The in the dam generate electricity.
- 4- Water from is used in electricity generation .
- 5- Wind is aenergy resource.

Read the following statements and then correct the wrong one::

- 1- Water is non-renewable resource of energy .
- 2- Water from the rivers above the dam stores kinetic energy .
- 3- The electricity can be send along wires to cities.
- 4- We can generate electricity by wind and water .
- 5- The electricity that generated by water is called hydroelectricity.

Weekly assessment :

Test (1)

Answer the following questions :

1- Complete the following sentence:

We can use ,in generating electricity.

2- Write the scientific term :

Energy stored uphill water rivers.

3- Give reasons:

Turbines and generators in dams have important role.

4- What happens when:

Rivers run downhill.

5- Determine the input and output energies in turbines and generators inside the dams .

Test (2)

Answer the following questions :

1- Complete the following sentence:

From the renewable resources of energy ,

2- Write the scientific term :

Energy that make turbines and generators in dams works.

3- Give reasons:

The renewable energy resources are very important .

4- What happens when:

Turbines and generators are stopped in dam.

5- Determine the input and output energies in windmills.**Test (3)**

Answer the following questions :

1- Complete the following sentence:

..... and found in in the dam generate electricity.

2- Write the scientific term :

Energy that produced due to the operations of turbines and generators in dams.

3- Give reasons:

Dams have important role in electricity generation .

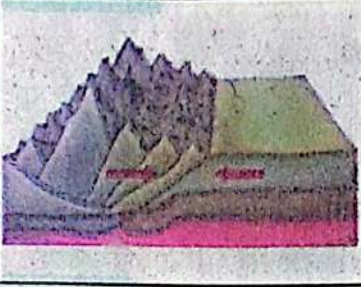
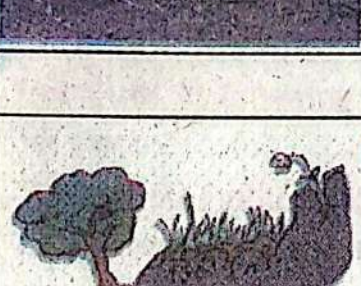
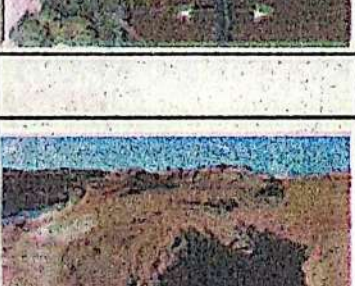
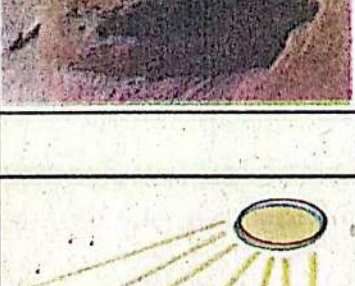
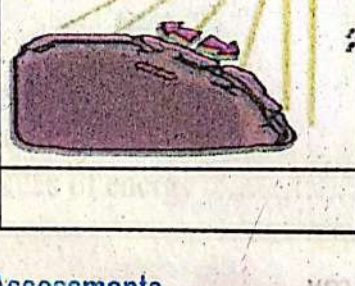
4- What happens when:

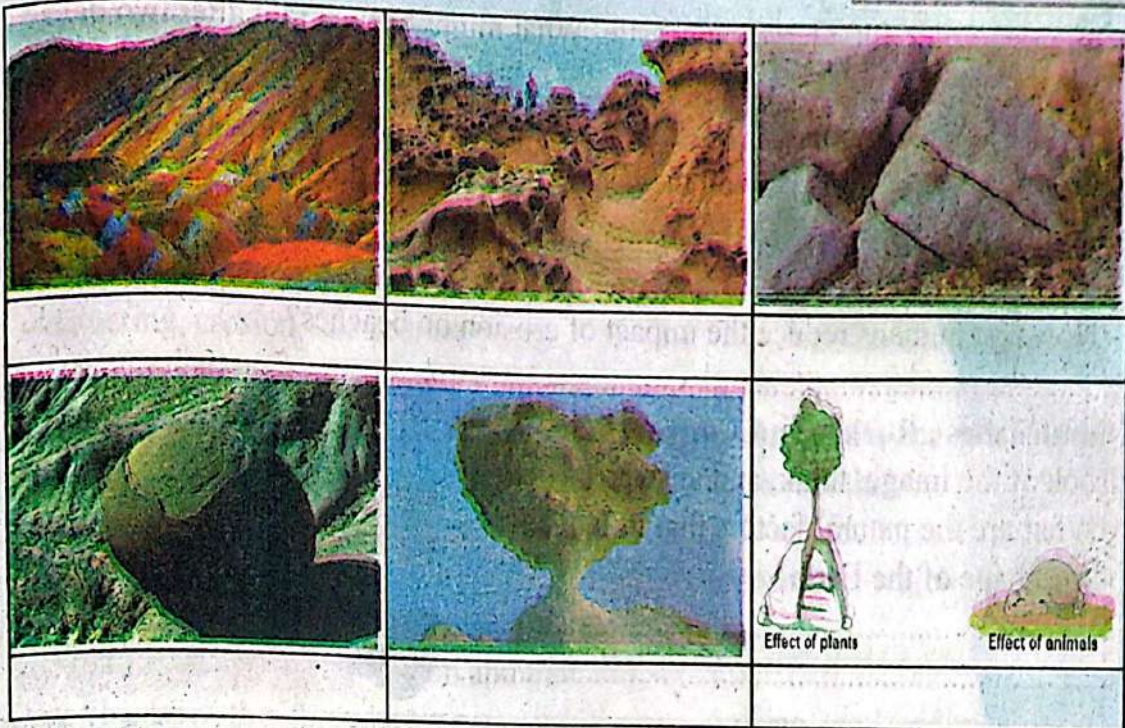
Stop building of dams.

5- Determine the output and input energies in watermills .

Classroom Performance:

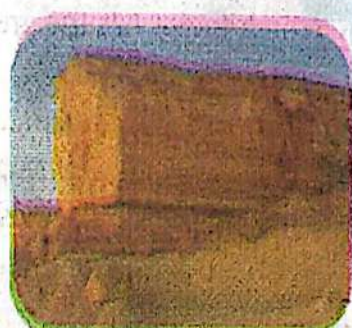
By observing the following images, identify below each image the reason for the breaking down of the rocks.



What I Already Know

The Earth's surface is constantly changing due to natural forces such as wind and water. Through the images in front of you, you will see how nature can reshape the Earth.

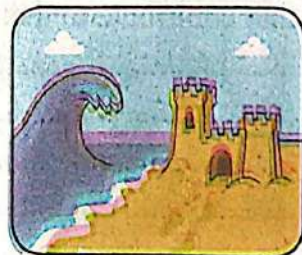


Think and then answer: How do these changes occur, and why are they important to our lives ?

Disappearing Sandcastles :

The Earth's surface is constantly changing due to natural factors such as wind and water.

A clear example of this is the disappearance of sandcastles from the beach shortly after they are built.



Second Term

- Imagine you built a large sandcastle. What might happen to it after two days?
- Why don't footprints stay on the beach until the next day?
- How can humans reduce the impact of erosion on beaches?

Sandcastles , Rocks , and Canyo

Look at the image, think, and answer:

- What are the natural factors that influence the shape of the Earth?



- Which is more rapid change: sandcastles or coastal rocks? Why?
- Which factor has the greatest influence on each: wind or water?
- What are the similarities and differences between coastal rocks and sandcastles?

Look at the image of the canyons; think about it, and then answer:

How are canyons formed? What are factors that contribute to their formation?

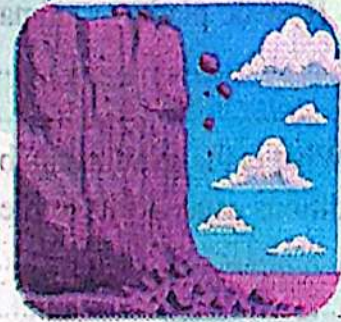


Shaping the Earth :

Have you ever noticed rocks breaking apart or soil moving from one place to another?

Have you seen a valley or a canyons in an image or in nature?

These things happen because of natural processes such as weathering, erosion, and sedimentation.



Complete the following sentences:

- The process of helps break up rocks, while the process of moves rocks and sand from one place to another.
- When water carries soil from one place to another, it is called
- Sand dunes are formed as a result of sand deposition, which is called
- Look at the image of the canyon and then answer:
- Describe how the three processes (weathering, erosion, and sedimentation) helped to shape this landscape?

.....

.....

.....

.....

.....

.....



- What are factors that speed up or slow down these processes?

What is Weathering?

Have you ever ask where small rocks or sand come from? Have you ever seen a large rock that is broken or cracked?

This is caused by weathering.

- Look at the image, then think with your partner and answer:
- Explain how wind or water can affect large rocks. Give an example from nature.

.....

.....

.....

.....



- How do plants or animals help weathering occur?

What is the relationship between weather and weathering? How can weather conditions cause rocks to break down?

By the help of the textbook and in light of what you have learned, Write the following:

Weathering	
Erosion	
Deposition	

Homework (Performance):

Complete the following statements:

- 1- The process by which rocks or soil moving is known as
- 2- Sediment down is a process of
- 3- Canyon is formed after
- 4- Some changes to Earth's surface happen taketime and some take.....time .
- 5- Sandcastle wrecked during.....

Read the following statements and then correct the wrong one:

- 1- Water and wind are factors that shape the surface of Earth .
- 2- Wadi Nakhr in the country of Oman .
- 3- Canyon is formed by wind.
- 4- Erosion and weathering change the shape of Earth's surface .
- 5- The process by which rocks are broken into smaller pieces is known as weathering .

Weekly assessment :

Test (1)

Answer the following questions :

1- Complete the following sentence:

Coastal rocks are formed by a period of time.

2- Write the scientific term : The process by which sediment down.

3- Give reasons:

The waves cause beach erosion.

4- What happens when:

Rocks are broken into smaller pieces.

5- Determine the two factors that affect on the Earth's surface .

Test (2)

Answer the following questions :

1- Complete the following sentence:

.....moving soil from one place to another.

2- Write the scientific term : Moving fragments of rocks or soil around.

3- Give reasons:

Weathering and erosion change the shape of Earth's surface.

4- What happens when:

Waves crash the beach.

5- Determine the difference between weathering and erosion.

Test (3)

Answer the following questions :

1- Complete the following sentence:

..... causing beach erosion.

2- Write the scientific term : Breaking apart rocks.

3- Give reasons:

Weather factors change Earth's surface.

4- What happens when:

Sediment settling.

5- Show how Earth's surface change by the time .

Concept One : Breaking Down and Moving Rocks

Week (10)

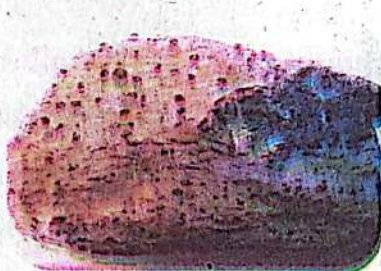
The rest of lesson (2) and lesson (3)

Date: / /

Classroom Performance:

Types of Weathering :

Look at the pictures and then identify the type of weathering (mechanical or chemical) in each rock:

	
..... Weathering	 Weathering
	
..... Weathering	 Weathering
	
..... Weathering	 Weathering

Look at the images and then complete the following sentences to explain the steps involved in the mechanical weathering of rocks:

 A	Water infiltrates and accumulates within the fine-grained rocks.
 B	Water freezes when the temperature drops, then expand and causes in cracks of rocks
 C	Ice melts and water fills which are newly formed.
 D	The cycle of and continues until rock breaks.

- Compare between mechanical weathering and chemical weathering in terms of their causes and effects on rocks:

Points of comparison	Mechanical weathering	Chemical weathering
Causes		
Effects on rocks		

Homework (Performance):

Complete the following statements:

- 1- Water freezes when the temperature drops, expands and causes
- 2- The cycle of and until rock breaks.
- 3- Living organisms cause weathering .
- 4- The rust of rocks are caused by
- 5- and cause the breaking of rocks .

Read the following statements and then correct the wrong one:

- 1- There is one type of weathering .
- 2- Most caves are formed due to chemical weathering .
- 3- The cycle of melting and freezing continues until rock breaks.
- 4- Oxygen reacts with iron in rocks to create yellow – colored rust .
- 5- Chemical weathering breaks the rocks into smaller pieces

Weekly assessment :

Test (1)

Answer the following questions :

1- Complete the following sentence:

Chemical weathering the structure of rocks.

2- Write the scientific term :

Breaking down the rocks into pieces without any change in its structure .

3- Give reasons: Some rocks appear red .

4- What happens when: Acid rain falls on the rocks.

5- What are the differences between the chemical weathering and mechanical weathering?

Test (2)

Answer the following questions :

1- Complete the following sentence:

Mechanical weathering the structure of rocks .

2- Write the scientific term:

Breaking down the rocks into pieces with a change in its structure.

3- Give reasons: Oxygen causes a chemical weathering .

4- What happens when: Water infiltrates and accumulates within the fine- grained rocks.

5- What are the similarities between the chemical weathering and mechanical weathering?

Test (3)

Answer the following questions :

1- Complete the following sentence:

From the factors that affect the rocks..... and.....

2- Write the scientific term :

A type of weathering that causes by melting and freezing of water inside the rocks .

3- Give reasons: Lichens cause chemical weathering .

4- What happens when: Oxygen reacts with iron found inside the rocks.

5- Mention one difference between chemical & mechanical weathering .

Concept One : Breaking Down and Moving Rocks

Week (11)

Lesson (4) and lesson (5)

Date: / /

Classroom Performance:

Erosion :

Erosion is a process that occurs when nature moves rocks and sand from one place to another, just as the wind moves leaves, it also moves sand.

Erosion



Look at the figure, think about it with your partner, and then answer:

- Imagine you are on a trip to the desert and you see sand dunes. How were these dunes formed?

.....

.....

- Guided by the image, concluded two factors of erosion.

.....

- What is the difference between weathering and erosion?

.....

.....

- What is the relationship between water speed & occurrence of erosion?

.....

.....

- How can humans reduce the harmful effects of erosion?

Deposition

After rocks break down due to weathering and are transported by erosion, the final stage is deposition, which is the process of depositing these sediments in new places.

Deposition



Look at the figure, think about it with your partner, and then answer:

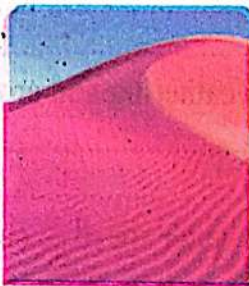
- What is the relationship between erosion and deposition?
- How does deposition affect the shape of riverbanks and river channels?
- Why do sediments settle when the wind calms down?
- Extract from the image the new landforms that have been created by deposition.
- Suggest a way to utilize deposition in agriculture or construction.

Have you noticed how the earth around us is changing? Rocks break, sand moves, and new places are formed!

These changes do not happen by chance, but are the result of three important natural processes: weathering, erosion, and deposition.



Weathering



Sand Dunes



Nile River Delta

Look at the previous images, think about it with your partner, and then answer:

- What is the process that helped to form the Nile River delta?

.....

- How can weathering affect the shape of mountains?

.....

Look at the image of sand dunes. What process led to their formation?

.....

▶ Homework (Performance):

Complete the following statements:

- 1- Dunes are formed due to
- 2- There are a relation between and deposition.
- 3- From transferring factors and
- 4- Sediments create river.....
- 5- Rocks and soil are moved around by the effect of

Read the following statements and then correct the wrong one:

- 1- Gravity pulls rocks down mountainsides .
- 2- Stronger winds will blow less sand and move it farther .
- 3- When the sand is left in a new place, it has been deposited.
- 4- Erosion and weathering are the same processes.
- 5- Weathering and deposition may take place together .

▶ Weekly assessment :

Answer the following questions : **Test (1)**

1- Complete the following sentence:

The rocks may erode after process.

2- Write the scientific term : The process that occurs when sand or rocks are moved from one place to another .

3- Give reasons: There are a relation between erosion and weathering.

4- What happens when: Breaking rocks into small pieces.

5- Mention the difference between erosion and deposition and rearrange the two processes .

Test (2)

Answer the following questions :

1- Complete the following sentence:

..... pull sand away from beaches.

2- Write the scientific term : The pieces of weathered rock that moved from its place.

3- Give reasons: The deposition is a very important process.

4- What happens when: The waves crash the beach.

5- Mention the difference between weathering and deposition and which of them occur first ?

Test (3)

Answer the following questions :

1- Complete the following sentence:

The sand grains accumulate on the top of each other forming

2- Write the scientific term :

The process that happen after erosion and causes the formation of delta .

3- Give reasons: Weathering and erosion change landforms.

4- What happens when: Sediments settling.

5- Mention one difference between the formation of dunes and formation of delta .

Monthly exercise (2)

Complete the following sentences:

1. Rocks break down into small pieces in its place and are transported by the process to another place.
2. is a natural process that takes years and its effects on rocks to become happen. .
3. Due to weathering, erosion, and deposition processes, the of northern Egypt were formed.
4. Wind carries sand and deposits it on the ground in a new place through the process.
5. The melting and freezing cycle of water in the rocks cracks helps in theweathering of rocks.
- 6- causes weathring of rocks, like lichens, over time, producing acid with- in the rocks.
- 7- grows in rock cracks and works to break them down into small pieces.

- 8- Caves formed inside of the mountain due to..... weathering which forms rust due to wind and rain.
- 9- Mechanical weathering continues to break down rocks until they become
- 10- From the large canyons , the Nakhr Valley in..... and the Colored Canyon in
- 11- The generated energy by the force of water through huge generators is called
- 12- Water, wind, and solar energy are sources of..... energy.
- 13- Coal, oil, and natural gas are sources ofenergy.
- 14 - If you are asked to heat food in a safe, clean, and inexpensive way, you might use a
- 15 - Watermills and windmills are considered sources of energy.

Complete the following sentences with the suitable words between brackets:

(Dam - Weathering - Turbines - Canyons)

1. Wavy cliffsides and high peaks indicate the formation of a
2. Water flow can be controlled by to increase its potential energy.
3. produce electricity through generators in the dam.
4. One of the processes that changes the Earth's landforms is

Give reasons for:

- 1- When rocks are weathered, they break down into smaller pieces and are transported to a far place.
- 2- Deposition is the final stage for breaker rocks.
- 3- The accumulation of sediments leads to the formation of new landforms.
- 4- There is a relationship between weathering, erosion, and deposition.
- 5- The Western Desert in Egypt was formed over the years from sand dunes.
- 6- Sandcastles disappear near the beach.

Write what the following statements refer:

- 1- The energy emitted from the sun to provide heat in a solar cooker.
- 2- A large Canyon formed by environmental factors over time, located in Oman.
- 3- The deposition of sediments resulting from the breaking down of rocks into small pieces and their accumulation near the beach.
- 4- The process of changing the Earth's landforms due to weathering factors.
- 5- The interaction of air and water with rocks leads to break down rocks and showed in a red color.

Mention the importance for each one of the following:

- 1- Watermills and windmills.
- 2- Wind turbines.

Second Term

- 3- Water downhill and waterfalls.
- 4- Dams over rivers.
- 5- Electric generator.
- 6- Solar cooker.
- 7- Water, wind and heat in weathering, erosion and deposition processes.
- 8- Oxygen in the process of chemical weathering.

Choose the correct answer between brackets:

- 1- The presence of sand dunes or sediments in a region, tell us that they are.....
(Eroded in their place - Weathered in their place -
Weathering and erosion - Erosion and deposition)
2. Which of the following landforms is steep and was formed due to the very flow of water ?
(Plains - Mountains - Canyons - Valleys)
- 3- Red rust in sedimentary rocks indicates happening of the..... process.
(erosion of rocks - mechanical weathering - chemical weathering - deposition of rocks)
- 4- When rocks break down due to temperature changes, this indicates a process of
(Mechanical weathering - Chemical weathering - erosion by breakdown - Water precipitation)
- 5- The mixing of acidic water with rocks causes
(mechanical weathering - chemical weathering - freezing water - rock movement)
- 6- are from examples for sources of energy that are consumed by humans faster than they are created.
(Solar energy - Wind energy - Hydroelectric energy - Fossil fuels)
7. are from examples of renewable energy sources.
(Water - Coal - Natural gas - Fossil fuels)
- 8- The energy produced by turbines is called
(potential energy - kinetic energy - chemical energy - hydroelectric energy)
- 9 - To convert light energy into electrical energy, we use
(windmills - solar panels - wind turbines - water turbines)
- 10 - One of the benefits of the sun is the production of
(light energy - radioactive energy - kinetic energy - thermal energy)

Put (✓) or (×):

- 1- The increase of the water flow, the increase of the erosion. ()
- 2- The walls of canyons are not very high and have small slopes. ()
- 3- A computer depends on kinetic energy. ()
- 4- A ceiling fan depends on electrical energy. ()
- 5- The function of TV devices depends on hydroelectric energy. ()
- 6- To power the cell phone depends on potential and kinetic energy. ()

Concept two : Changing Landscape

Lesson (1) and (2)

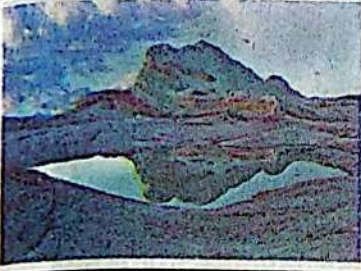
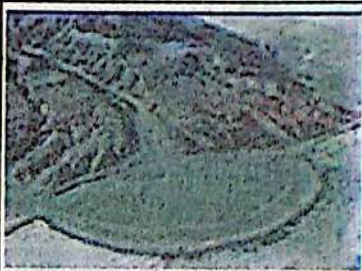
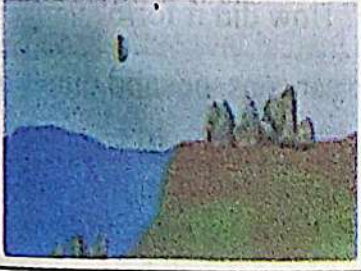
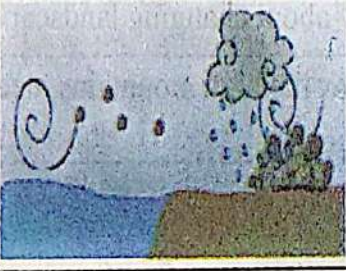
Week (12)

Date: / /

Classroom Performance:

(Weathering → Erosion → Deposition)

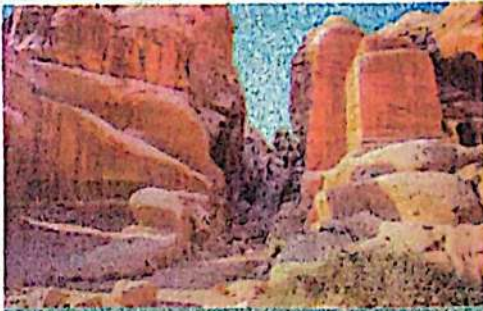
In front of you a group of images. Note them well, then put each image to the process it belongs to:

		
.....		
		
.....		
		
.....		
		
.....		

Second Term

Canyons

When water moving over the dirt or sand, it pushes some of it and leaves a traces behind. Over time, this traces may develop at long time into a canyon, which is a long, narrow lowland caused by the movement of water.



Wadi Nakhr, Oman



Wadi Rum, Jordan



Small Canyon, Thailand



Colored Canyon, Sinai

Notice previous images and think with your partner, then answer:

- Are all Canyons the same? What are the similarities and differences?

.....

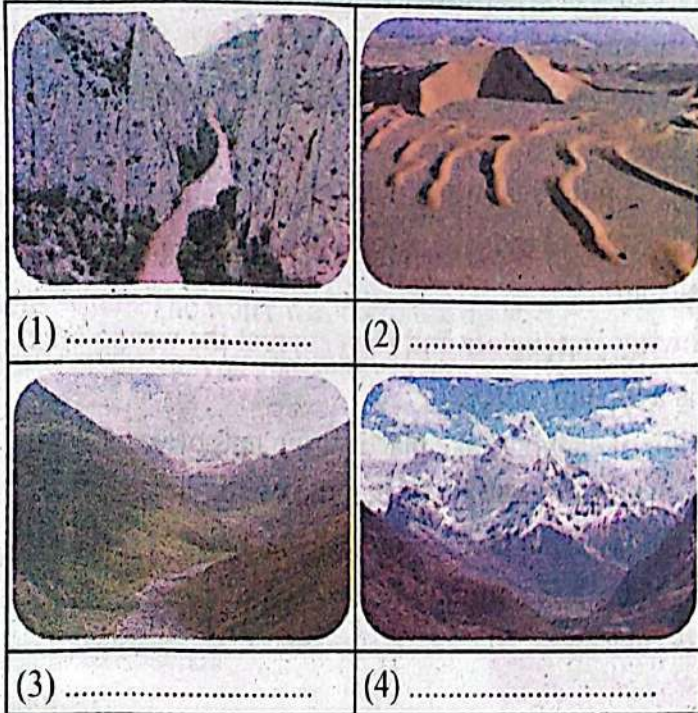
- How does running water help in the formation of Canyons?

.....

What do you already know about changing landscape? How did it form?

Have you ever thought how the high mountains, deep canyons, or sand dunes of the desert came to be?

Look at the images and then answer: Write under each image the name of the type of landforms.



Extract from the images the Landform that was happened by deposition.

.....

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

